THE INVENTION CLAIMED IS:

1. A communications network, comprising:

a modem termination system (MTS);

a voice band tester (VBT) coupled to the MTS, the VBT being located at a first location;

a modem tester coupled to the MTS, the modem tester being located at a second location remote from the first location, the modem tester adapted to provide a first communication signal to the VBT via the MTS; and

a Voice over Internet Packet (VoIP) monitoring device coupled to the MTS and the VBT, the VoIP monitoring device adapted to monitor the first communication signal, and calculate a first Quality of Services (QoS) score based on traffic density between the MTS and the VBT; wherein the VBT is adapted to:

calculate a first Transmission Impairment Test (TIT) score based on the first communication signal and a first received communication signal received by the VBT from the modem tester, and

provide the first TIT score to the VoIP monitoring device.

2. The communications network as claimed in claim 1 wherein:

the VBT is further adapted to provide a second communication signal to the modem tester via the MTS;

the modem tester is further adapted to calculate a second TIT score based on the second communication signal and a second received communication signal received by the modem tester from the VBT, and provide the second TIT score to the VoIP monitoring device; and

the VoIP monitoring device is further adapted to monitor the second communication signal, and calculate a second QoS score based on a transmission of the second communication signal from the VBT to the modem tester.

3. The communications network as claimed in claim 2 wherein the first communication signal, the first received communication signal, the second communication signal, and the second received communication signal include TIT files.

4. The communications network as claimed in claim 3 wherein:

the first TIT score is a score selected from the group consisting of Perceptual Speech Quality Measurement (PSQM) score and Perceptual Evaluation of Speech Quality (PESQ) score;

the second TIT score is a score selected from the group consisting of PSQM score and PESQ score; and

the TIT files are files selected from the group consisting PSQM files and PESQ files.

5. The communications network as claimed in claim 2 wherein:

the first QoS score is determined based on factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the first communication signal from the modem tester to the VBT; and

the second QoS score is determined based on factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the second communication signal from the VBT to the modem tester.

6. The communications network as claimed in claim 1 wherein the first communication signal contains a special code detectable by the VoIP monitoring device, and the VoIP monitoring device begins to monitor signal transmissions from the modem tester to VBT via the MTS once the special code is detected.

7. The communications network as claimed in claim 1 wherein the MTS is part of a network system selected from a group consisting of a wired network system, a wireless network system, and a combination thereof.

8. The communications network as claimed in claim 1 wherein the VoIP monitoring device is adapted to provide the first PSQM score, and the first QoS score to the MTS for storage.

9. The communications network as claimed in claim 1 further comprising:

a Broadband Termination Interface (BTI) coupled to the MTS, the BTI adapted to convert broadband signals to signals selected from a group consisting of television, packetized data, video, voice, and a combination thereof.

10. The communications network as claimed in claim 1 wherein the modem tester is integrated with the BTI.

11. A communications network, comprising:

a cable modem termination system (CMTS);

a voice band tester (VBT) coupled to the CMTS, the VBT being located at a first location;

a cable modem tester coupled to the CMTS, the cable modem tester being located at a second location remote from the first location, the cable modem tester adapted to provide a first communication signal to the VBT via the CMTS; and

a Voice over Internet Packet (VoIP) monitoring device coupled to the CMTS and the VBT, the VoIP monitoring device adapted to monitor the first communication signal, and calculate a first Quality of Services (QoS) score based on traffic density between the CMTS and the VBT; wherein:

the VBT is adapted to calculate a first Transmission Impairment Test (TIT) score based on the first communication signal and a first received communication signal received by the VBT from the cable modem tester, and provide the first TIT score to the VoIP monitoring device,

the VBT is further adapted to generate a second communication signal to the cable modem tester via the CMTS,

the cable modem tester is further adapted to calculate a second TIT score based on the second communication signal and a second received communication signal received by the cable modem tester from the VBT, and provide the second TIT score to the VoIP monitoring device,

the VoIP monitoring device is further adapted to monitor the second communication signal, and calculate a second QoS score based on a transmission of the second communication signal from the VBT to the cable modem tester,

the first QoS score is determined based on factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the first communication signal from the cable modem tester to the VBT, and

the second QoS score is determined based on factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the second communication signal from the VBT to the cable modem tester.

12. The communications network as claimed in claim 11 wherein:

the first communication signal contains a special code detectable by the VoIP monitoring device, the special code includes an identifier which identifies the cable modem tester;

the VoIP monitoring device is adapted to begin monitoring signal transmissions from the cable modem tester to VBT via the CMTS once the special code is detected; and

the CMTS is part of a network system selected from a group consisting of a wired network system, a wireless network system, and a combination thereof.

13. The communications network as claimed in claim 11 wherein:

the first communication signal, the first received communication signal, the second communication signal, the second received communication signal include TIT files, the TIT files are files selected from the group consisting PSQM files and PESQ files;

the first TIT score is a score selected from the group consisting of Perceptual Speech Quality Measurement (PSQM) score and Perceptual Evaluation of Speech Quality (PESQ) score; and

the second TIT score is a score selected from the group consisting of PSQM score and PESQ score.

14. A communications network, comprising:

a Digital Subscriber Line Access Multiplexer (DSLAM);

a voice band tester (VBT) coupled to the DSLAM, the VBT being located at a first location;

a Digital Subscriber Line (DSL) tester coupled to the DSLAM, the DSL modem tester being located at a second location remote from the first location, the DSL modem tester adapted to provide a first communication signal to the VBT via the DSLAM; and

a Voice over DSL (VoDSL) monitoring device coupled to the DSLAM and the VBT, the VoDSL monitoring device adapted to monitor the first communication signal, and calculate a first Quality of Services (QoS) score based on traffic density between the CMTS and the VBT; wherein the VBT is adapted to:

calculate a first Transmission Impairment Test (TIT) score based on the first communication signal and a first received communication signal received by the VBT from the DSL modem tester, and

provide the first TIT score to the VoDSL monitoring device.

15. A method for monitoring quality of signal transmissions within a communications network, comprising:

providing a first communication signal from a cable modem tester located at a first location to a voice band tester (VBT) located at a second location remote from the first location via a Cable Modem Termination System (CMTS);

identifying the first communication signal and begins monitoring signal transmissions from the cable modem tester to the VBT via the CMTS;

calculating a first Transmission Impairment Test (TIT) score based on the first communication signal and a first received communication signal received by the VBT from the cable modem tester;

providing the first TIT score to a Voice over Internet Packet (VoIP) monitoring device; and

calculating a first Quality of Services (QoS) score based on traffic density between the CMTS and the VBT.

16. The method as claimed in claim 15 further comprising:

providing a second communication signal from the VBT to the cable modem tester via the CMTS;

identifying the second communication signal and begins monitoring signal transmissions from the VBT to the cable modem tester via the CMTS;

calculating a second TIT score based on the second communication signal and a second received communication signal received by the cable modem tester from the VBT;

providing the second TIT score to the VoIP monitoring device; and

calculating a second QoS score based on a transmission of the second communication signal from the VBT to the cable modem tester.

17. The method as claimed in claim 15 wherein identifying the first communication signal includes identifying a special code detectable by the VoIP monitoring device.

18. The method as claimed in claim 17 wherein the special code includes an identifier which identifies the cable modem tester and wherein the MTS is part of a network system selected from a group consisting of a wired network system, a wireless network system, and a combination thereof.

19. The method as claimed in claim 16 wherein:

calculating the first QoS score uses factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the first communication signal from the cable modem tester to the VBT; and

the second QoS score uses factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the second communication signal from the VBT to the cable modem tester.

20. The method as claimed in claim 16 further including:

predicting a TIT score based on a QoS score;

informing a user of the communications network that services to the communications network may be needed to restore signal transmission quality if the TIT score is below a minimum TIT score.

21. The method as claimed in claim 17 wherein the first communication signal, the first received communication signal, the second communication signal, and the second received communication signal include TIT files.

22. The method as claimed in claim 21 wherein:

the first TIT score is a score selected from the group consisting of Perceptual Speech Quality Measurement (PSQM) score and Perceptual Evaluation of Speech Quality (PESQ) score;

the second TIT score is a score selected from the group consisting of PSQM score and PESQ score; and

the TIT files are files selected from the group consisting PSQM files and PESQ files.

23. A method for monitoring quality of signal transmissions within a communications network, comprising

providing a first communication signal from a cable modem tester located at a first location to a voice band tester (VBT) located at a second location remote from the first location via a Cable Modem Termination System (CMTS);

identifying the first communication signal and begins monitoring signal transmissions from the cable modem tester to the VBT via the CMTS;

calculating a first Transmission Impairment Test (TIT) score based on the first communication signal and a first received communication signal received by the VBT from the cable modem tester;

providing the first TIT score to a Voice over Internet Packet (VoIP) monitoring device;

calculating a first Quality of Services (QoS) score based on a transmission of the first communication signal from the cable modem tester to the VBT;

providing a second communication signal from the VBT to the cable modem tester via the CMTS;

identifying the second communication signal and begins monitoring signal transmissions from the VBT to the cable modem tester via the CMTS;

calculating a second TIT score based on the second communication signal and a second received communication signal received by the cable modem tester from the VBT;

providing the second TIT score to the VoIP monitoring device; and

calculating a second QoS score based on a transmission of the second communication signal from the VBT to the cable modem tester.

24. The method as claimed in claim 23 further including:

predicting a PSQM score based on a QoS score;

informing a user of the communications network that services to the communications network may be needed to restore signal transmission quality if the TIT score is below a minimum TIT score.

25. A method for monitoring quality of signal transmissions within a communications network, comprising:

providing a first communication signal from a Digital Subscriber Line (DSL) tester located at a first location to a voice band tester (VBT) located at a second location remote from the first location via a Digital Subscriber Line Access Multiplexer (DSLAM);

identifying the first communication signal and begins monitoring signal transmissions from the DSL modem tester to the VBT via the DSLAM;

calculating a first Transmission Impairment Test (TIT) score based on the first communication signal and a first received communication signal received by the VBT from the DSL modem tester;

providing the first TIT score to a Voice over DSL (VoDSL) monitoring device; and

calculating a first Quality of Services (QoS) score based on a transmission of the first communication signal from the DSL modem tester to the VBT.